

REMARKS

In the Office Action of February 13, 2001 in the above-identified application, Claims 1 - 12 were rejected. No Claim was allowed. In response, Claims 2 - 5 are canceled, Claims 1 and 6 - 12 are amended and new Claims 13 - 16 are added to the application. This leaves Claims 1 and 6 - 16 pending in the application for reexamination and reconsideration, which are respectfully requested in view of the following remarks.

Objections to the Claims

Claim 1 was objected to on account of informal errors. In response, Claims 1 is amended. It is respectfully submitted that this rejection is thereby overcome.

Claim 2 was objected to on account of informal errors. In response, Claim 2 is canceled and it is respectfully submitted that the objection is overcome in the new Claim 14.

Rejection of Claims 2 - 5 and 10 - 12 under 35 U.S.C. § 112, second paragraph

Claims 2 - 5 and 10 - 12 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In response, Claims 2 - 5 are canceled and it is respectfully submitted that the rejection is overcome in the new Claims 13 - 15. In particular, it is respectfully submitted that the new claims provide an antecedent basis for the terms defined therein and do not contain indefinite phrases such as "such as" or "possibly". It is respectfully submitted that these claims are now allowable.

Claims 10 - 12 are amended in response to the rejection of Claims 10 - 12 under 35 U.S.C. § 112, second paragraph, as being

indefinite. It is respectfully submitted that this rejection is thereby overcome.

Rejection of Claims 1 - 5 and 7 - 12 under 35 U.S.C. §103(a)
over Moses et al

Claims 1 - 5 and 7 - 12 were rejected under 35 U.S.C. §103(a) over Moses et al. The Examiner alleges that Moses discloses the limitations of Claim 1, except for the rigid part having a length at least equal to half of the water depth, and the Examiner further takes the position that finding the optimum length is a design choice within the ordinary skill in the art.

This rejection is respectfully traversed. The present invention relates to pipe having at least one flexible riser part (7) connected, at one end, to the point located below the surface, and at least one rigid riser part (6) connected to the flexible riser part at one end and to the floating support at the second end. The rigid riser part has a length at least equal to half the water depth. The amendment to Claim 1 clarifies further that the "rigid part" and the "flexible part" as set forth in the original claim are both sections of riser- a rigid riser part and a flexible riser part. This combination of a flexible riser and a rigid riser is neither disclosed nor suggested by Moses et al, which shows the use of several rigid risers joined in series by means of flexjoints. Moses et al does not disclose or suggest a pipe having at least one flexible riser part connected, at one end, to the point located below the surface, and at least one rigid riser part connected to the flexible riser part at one end and to the floating support at the second end. Accordingly, it is respectfully submitted that 1 - 5 and 7 - 12 would not have been obvious over Moses et al.

Rejection of Claim 6 under 35 U.S.C. §103(a) over Moses et al in view of Willis

Claim 6 was rejected under 35 U.S.C. §103(a) over Moses et al in view of Willis. Moses et al is cited for the reasons discussed above, and Willis is cited as teaching insulated pipes.


This rejection is respectfully traversed. As discussed above, Moses et al does not disclose or suggest the combination of a flexible riser part and a rigid riser part, with a rigid riser connected to a floating support and a flexible riser part connected to a point located below the surface. Willis does not supply this missing feature of the present invention. Accordingly, it is respectfully submitted that Claims 1 - 5 and 7 - 12 would not have been obvious over Moses et al alone, or in combination with Willis (EPO 0467635 A2).

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that Claims 1 and 6 - 16 are allowable. Favorable reconsideration is respectfully requested.

Kindly charge any additional fees due, or credit overpayment of fees, to Deposit Account No. 01-2135 (Case No. 612.37981X00).

Respectfully submitted,
ANTONELLI, TERRY, STOUT & KRAUS



Ralph T. Webb
Reg. No. 33,047

RTW/RTW
(703) 312-6600

Marked up copy to show changes made:

IN THE CLAIMS

1) (amended) A pipe for great water depths (D) allowing transfer of a fluid between a floating support (1) and a point located below and at a distance from the water surface, characterized in that it comprises:

⇒ at least one flexible riser part (7) connected, at one end, to the point located below the surface, and

⇒ at least one rigid riser part (6) connected to the flexible riser part at one end and to the floating support at the second end thereof, said rigid riser part (6) having a length at least equal to half the water depth D.

6) (twice amended) A pipe as claimed in Claim 1, further comprising heat insulation means placed on at least the rigid riser part and/or the flexible riser part.

7) (twice amended) A pipe as claimed in Claim 1, characterized in that said rigid riser part is held up to the floating support by holding means (9) allowing said pipe to be tensioned under the effect of its own weight.

8) (twice amended) A ~~production riser or riser~~ pipe as claimed in Claim 1 wherein the pipe is a production riser or riser pipe for effluent transfer from a production well to a floating support.

9) (twice amended) ~~An injection pipe or line~~ A pipe as claimed in Claim 1, wherein the pipe is an injection pipe or line and characterized in that the rigid riser part is connected to a source of fluid to be injected and the flexible riser part is connected to a point where the fluid is to be injected.

10) (twice amended) A system for producing petroleum effluents in great water depths allowing fluid transfer between a floating support and a source of effluents, characterized in that it the system comprises at least one or more risers and/or one or more injection lines, and wherein each of the one or more risers and/or one or more injection lines is a pipe as claimed in Claim 1.

11) (twice amended) A system as claimed in claim 10, further comprising a catenary anchor system (10) applied to the rigid riser part in the vicinity of the junction and/or of connector (8) between flexible riser part (7) and rigid riser part (6).

12) (twice amended) A production system as claimed in Claim 10, further comprising additional means for tensioning the riser(s).